



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,760	12/12/2003	John Charles Calhoun	003797.00690	8738

28319 7590 01/04/2007  
BANNER & WITCOFF LTD.,  
ATTORNEYS FOR CLIENT NOS. 003797 & 013797  
1001 G STREET, N.W.  
SUITE 1100  
WASHINGTON, DC 20001-4597

EXAMINER
----------

BERHANU, SAMUEL

ART UNIT	PAPER NUMBER
----------	--------------

2838

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/733,760	<b>Applicant(s)</b> CALHOON ET AL.	
	<b>Examiner</b> Samuel Berhanu	<b>Art Unit</b> 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-21 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-21 and 28-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8-10, 12, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 2004/0145342) in view of Stephens (US 5,734,254).

Regarding Claim 8, Lyon discloses in Figures 1 and 2, a battery pack (234) configured for receiving inductive energy for charging a battery of a host device, comprising: a processor unit (248) for processing computer readable data relevant to receiving the inductive energy and for processing data communication with a computer system; a pick up coil (232) configured to alternate between an energized state and de-energized state at regular intervals in a polling modem (noted that any coil is configured to energize and de-energize at a regular interval in a polling mode, and no polling mode circuitry is claimed, e.g. any coil can transmit FM, AM and etc.) and configured for receiving the inductive energy and for receiving an inductive data communication (Paragraphs 0023); a charger (230) operatively coupled to the processor unit and the pick up coil; the charger configured to output a direct current powered by the inductive energy (222); and relevant to the inductive data communication; an energy storage unit (234) configured for receiving the direct current (Paragraphs 0023-0030). Lyon does

Art Unit: 2838

not disclose explicitly, a battery connector for connecting the battery of the host device with the direct current, the battery of the host device being separate from the battery pack. Stephens discloses in Figures 1 and 3, battery connector for connecting the battery of the host device with the direct current (noted that the secondary coil, 283, is arranged to receive power from the primary coil 284, and the element 284 outputs DC in order to charge the portable (host device battery), it is evident that in order to charge the battery of the portable device with DC an electrical means of connection must be presented for current flow), the battery of the host device being separate from the battery pack (210) (noted that the battery pack (210) is isolated from the battery of the portable electronic device (290) (See also Column 5, lines 8-15). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a DC connection means to the battery and to isolate the battery pack and the portable device battery as taught by Stephens in Lyon apparatus in order to provide energy from a power source independently to the electronic device and charge the energy supplies independently, such as a battery or battery packs.

Regarding Claim 9, Lyon discloses in Figure 2, the step of transmitting includes a step of transmitting authenticating data to charging source (paragraph 0027, 0029, 0033). Regarding Claim 10, Lyon discloses in Figures 1 and 2, the battery pack comprising a communications device (242) operatively coupled to the pickup coil (232).

Art Unit: 2838

Regarding Claim 10, Lyon discloses in Figure 2, the battery pack comprising a communications device (242) operatively coupled to the pickup coil (232).

Regarding Claim 12, Lyon discloses in Figure 2, the processor unit (240) is configured to provide a plurality of charging parameters to a charging source, which provides the inductive energy (Paragraphs 0025)

Regarding Claim 13, Lyon discloses in Figure 2, the processor unit is configured to provide a digital security certificate to a charging source (Sending an RFID tag, Paragraphs 0032-0033).

Regarding Claim 15, Lyon discloses in Figure 2, the an antenna (232) and a communications device (242) configured to receive the computer readable data and configured to transmit the data to the antenna for wireless data communications a charging source (paragraphs 0023 and 0032-0033)).

3. Claims 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. (US 5,455,466) in view of Stephens (US 5,734,254).

Regarding Claim 8, Parks et al disclose a battery pack configured for receiving inductive energy for charging a battery of a host device, comprising: a processor unit (228) for processing computer readable data relevant to receiving the inductive energy and for processing data communication with a computer system; a pick up coil (200b) configured to alternate between an energized state and de-energized state at regular intervals in a polling mode (noted that any coil is configured to energize and de-energize at a regular interval in a polling mode,

Art Unit: 2838

and no polling mode circuitry is claimed, e.g. any coil can transmit FM, AM and etc ) and configured for receiving the inductive energy and for receiving an inductive data communication; a charger operatively coupled to the processor unit and the pick up coil (224); the charger configured to output a direct current powered by the inductive energy (222); and relevant to the inductive data communication (the inductive link is used to transfer data and power (see abstract and Column 2, lines 58-65) ; an energy storage unit (225) configured for receiving the direct current (column 3, lines 50-60, Column 3, lines 65-67, Column 4, lines 19-50). Parks et. al. do not disclose explicitly, a battery connector for connecting the battery of the host device with the direct current, the battery of the host device being separate from the battery pack. Stephens discloses in Figures 1 and 3, battery connector for connecting the battery of the host device with the direct current (noted that the secondary coil, 283, is arranged to receive power from the primary coil 284, and the element 284 outputs DC in order to charge the portable (host device battery), it is evident that in order to charge the battery of the portable device with DC an electrical means of connection must be presented for current flow), the battery of the host device being separate from the battery pack (210) (noted that the battery pack (210) is isolated from the battery of the portable electronic device (290) (See also Column 5, lines 8-15). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a DC connection means to the battery and to isolate the battery pack and the portable device battery as taught by Stephens in Parks et. al. apparatus in order to provide energy from a power source

Art Unit: 2838

independently to the electronic device and charge the energy supplies independently, such as a battery or battery packs.

Regarding Claim 10, Parks et al. disclose the battery pack comprising a communications device (220) operatively coupled to the pickup coil (220).

Regarding Claim 11, Parks et al. disclose the battery pack in which the communications device (220) is configured to receive the computer readable data and transmit the data to the pick up coil (200b). Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. (US 5,455,466) in view of Higuchi et al. (US 6,163,132).

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. (US 5,455,466) in view of Stephens (US 5,734,254) as applied to claim 8 above, and further in view of Higuchi (US 6,163,132).

Regarding Claim 14, Parks et al. do not disclose, the processor unit is configured to send data to the computer system so as to indicate it is receiving inductive energy. However, Higuchi discloses in Figure 1 the processor unit (4b) is configured to send data to the computer system (5) so as to indicate it is receiving inductive energy (Column 4, lines 33-38). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a computing and indicating system to the battery pack in Parks et al. as taught by Higuchi et al. in order to monitor battery status.

5. Claims 16-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 2004/0145342) in view of Gosior et al. (US

Art Unit: 2838

2002/0159434), in view of Stephens (US 5,734,254), in view of Poletti (US 2003/0155892).

Regarding Claim 16, Lyon discloses in Figure 2, a computer implemented method of charging a battery with a battery pack, comprising the step of: receiving a polling message (receiving a command) from a charging source (Paragraph 0025)); the polling message including a data structure having a header and a payload transmitting a request for power to the charging source (; responsive to the polling message (paragraph 027); and receiving inductive power or an inductive data communication (242, 243) from the charging source responsive to the transmitted request (Paragraph 0027, 0029, 0032, 0033); generating a direct current responsive to the received inductive power; transmitting the direct current to charge battery, (the rectifier 230, generates a direct current) . Lyon does not disclose the polling message including a data structure having a header and a payload and the battery being separate from the battery pack. However, Gosior et al. disclose in Figure 8, data communications to the battery pack based on a polling message having a data communications to the battery pack based on a polling message having a header and a payload (Paragraphs 0122). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polling message that contains a payload, and a header as taught by Gosior et al. in Lyon's adaptive charger system and method in order to provide an efficient and reliable data transfer means for the charger and the device or the battery pack. Further, Stephens discloses in Figures 1 and 3, the battery being separate from the battery pack



Art Unit: 2838

(210) (noted that the battery pack (210) is isolated from the battery of the portable electronic device (290) (See also Column 5, lines 8-15. It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a DC connection means to the battery and to isolate the battery pack and the portable device battery as taught by Stephens in Lyon apparatus in order to provide energy from a power source independently to the electronic device and charge the energy supplies independently, such as a battery or battery packs. However, Lyon, Gosior et al, and Stephens do not disclose explicitly, displaying an object on a graphical user interface indicative of the step of receiving for indicating a type of power being received. Poletti discloses in Figure 3, displaying an object on a graphical user interface (22) indicative of the step of receiving for indicating a type of power being received (see Paragraph 0031). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a display with Lyon apparatus as taught by Poletti in order to visualize the type of charging and charging steps, and monitoring the charging process.

Regarding Claim 17, Lyon discloses in Figure 2, the step of transmitting includes a step of transmitting charging parameters to the charging source (paragraph 027).

Regarding Claim 18, Lyon discloses in Figure 2, the step of transmitting includes a step of transmitting authenticating data (a device information data) to charging source (paragraph 027 and 0033)

Regarding Claim 19, Lyon discloses in Figure 2, a step of initiating a charger responsive to the step of receiving ((paragraph 027).

Regarding Claim 21, Poletti discloses in Figure 3, wherein the step of displaying an object on a graphical user interface (22) includes displaying an icon.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 2004/0145342) in view of Gosior et al. (US 2002/0159434), in view of Stephens (US 5,734,2540) and in view of Poletti (US 2003/0155892) as applied to claim 16 above, and further in view of Higuchi et al. (US 6,163,132)

Regarding Claim 20, Lyon, Gosior et. al., Stephens and Poletti do not disclose explicitly, a step of transmitting data to a computer system for indicating the step of receiving inductive power. However, Higuchi et al disclose in Figures 1 and 2 a step of transmitting data to a computer system for indicating the step of receiving inductive power (Column 4, lines 33-38). It would have been obvious to a person having ordinary skill in the art at the time of the invention to add a computing and indicating system to the battery pack in Lyon's adaptive charger system and method as taught by Higuchi et al. in order to monitor battery status.

7. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 2004/0145342) in view of Stephens (US 5,734,254) as applied to claim 8 above, and further in view of Gosior et al. (US 2002/0159434).

Regarding Claim 28, Lyon does not disclose explicitly, the inductive data communication includes a polling message including a header and a payload. Gosior et al. disclose, the inductive data communication includes a polling

Art Unit: 2838

message including a header and a payload. It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polling message that contains a payload, and a header as taught by Gosior et al. in Lyon's adaptive charger system and method in order to provide an efficient and reliable data transfer means for the charger and the device or the battery pack.

8. Claim 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon (US 2004/0145342) in view of Stephens (US 5,734,254) in view of Gosior et al. (US 2002/0159434), and in view of Birk et. al. (US 2003/0236975).

Regarding Claim 29, Lyon discloses, wherein the payload includes at least one of an operating parameter and authentication information (Paragraphs 0033). Lyon, Stephens and Gosior et. al. do not disclose explicitly wherein the authentication information includes a security certificate. Birk et. al. disclose, in paragraph 0012, wherein the authentication information includes a security certificate. It would have been obvious to a person ordinary skill in the art at the time of the invention to add security information in Lyon's authentication information as taught by Birk et. al. in order to improve security during data communications.

Regarding Claim 30, Lyon discloses wherein the payload includes at least one of an operating parameter and authentication information (Paragraphs 0033). Lyon, Stephens and Gosior et. al. do not disclose explicitly wherein the authentication information includes a digital signature. Birk et. al. disclose, in paragraph 0012, wherein the authentication information includes a digital signature.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 8-21 and 28-30 have been considered but are moot in view of the new ground(s) of rejection, or not persuasive.

As to the argument that "a pick up coil configured to alternate between an energized state and de-energized state at regular intervals in a polling mode and configured for receiving the inductive energy and for receiving an inductive data communication". Since no polling mode circuitry is claimed, any coil is configured to energize and de-energize at a regular interval in a polling mode, e.g. any coil can transmit FM, AM and etc.

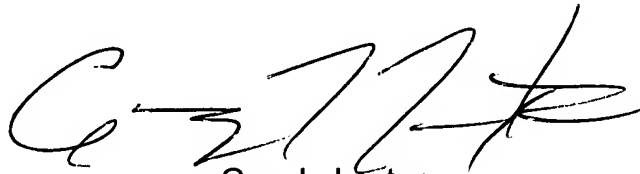
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Berhanu whose telephone number is 571-272-8430. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2838

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'G. Laxton', with a stylized flourish at the end.

Gary L. Laxton  
Primary Examiner  
Art Unit 2838

SB

12/21/2006